L Number	Hits	Search Text	DB	Time stamp
1	18	balanc$ with (cutting or remov$4 near4 metal or machining or metalworking or mill$4 or remov$ near4 material) with brak$ adj drum	USPAT; US-PGPUB	2004/07/19 07:00
2	73	balanc$ with groove and 74/573r,574.ccls.	USPAT; US-PGPUB	2004/07/19 07:08
5	3	(balancing or balance) with groove and 188/218a,250e,261.ccls.	USPAT; US-PGPUB	2004/07/19 07:09
4	3	(balancing or balance) with groove and 188/218a,250e,261.ccls.	USOCR	2004/07/19 07:13
3	47	(balancing or balance) with groove and 74/573r,574.ccls.	USOCR	2004/07/19 07:10
6	35	(balancing or balance) with groove and 188/$.ccls.	USOCR	2004/07/19 07:13
9	0	brak$4 adj drum same squeal$4 adj band same grooves	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:15
10	0	brak$4 adj drum same squeal$4 adj band same grooves	USOCR	2004/07/19 07:15
11	205	brak$4 adj drum same grooves	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:26
12	22	brak$4 adj drum same grooves same (outer adj (surface or periphery))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:16
13	3	brak$4 adj drum same grooves same (outer adj (surface or periphery)) same grooves with (shape or depth or taper$ or constant)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:17
16	31	brak$4 adj drum same grooves and grooves with (shape or width or depth)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:22
17	527	brak$4 adj drum same groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:26
18	274	brak$4 adj drum with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:32
19	769	F16D065/10.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:33
20	11	F16D065/10.ipc. and (groove or grooves) with (noise or squeak4 or noise or vibration or balanc$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:33
21	11	F16D065/10.ipc. and (groove or grooves) with (noise or squeak$4 or noise or vibration or balanc$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:35
22	6	brak$4 near2 drum same (groove or grooves) same (noise or squeak$4 or noise or vibration or balanc$4)	JPO	2004/07/19 07:36
-	5	("4986149"|"5483855"|"5586625"|"5992581"|"6321886").PN.	USPAT; US-PGPUB	2004/07/18 14:09
-	9	("3817149" | "4986149" | "5352305" | "5483855" | "5538111" | "5586625" | "5664648" | "5782324" | "5992581").PN.	USPAT	2004/07/18 14:06

-		0	6321886.URPN.	USPAT	2004/07/18 14:07
-		7	("4986149" | "5352305" | "5483855" | "5538111" | "5586625" | "5664648" | "5782324").PN.	USPAT	2004/07/18 14:07
-		3	5992581.URPN.	USPAT	2004/07/18 14:07
-		7	5586625.URPN.	USPAT	2004/07/18 14:07
-		2	("4986149" | "5483855").PN.	USPAT	2004/07/18 14:07
-		2	("3817149" | "4986149").PN.	USPAT	2004/07/18 14:07
-		4	5483855.URPN.	USPAT	2004/07/18 14:07
-		4	("2693695" | "2731887" | "2792725" | "3076363").PN.	USPAT	2004/07/18 14:08
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-		5	(US-6321886-$ or US-5992581-$ or US-5586625-$ or US-5483855-$ or US-4986149-$).did.	USPAT	2004/07/18 14:13
-		12	balanc$ with (mill$4 or remov$ near4 material) with brak$ adj drum	USPAT; US-PGPUB	2004/07/19 05:24
-		0	6601284.URPN.	USPAT	2004/07/18 14:22
-		24	("1686346" | "1746494" | "1876354" | "2086488" | "2493173" | "3005259" | "3205688" | "3354535" | "3355920" | "3670383" | "3991598" | "4067098" | "4262407" | "4554810" | "4563887" | "4781047" | "4958430" | "5285874" | "5345672" | "5385216" | "5586625" | "5596897" | "5782324" | "6148498").PN.	USPAT	2004/07/19 05:46
-		19	(US-6601284-$ or US-6148498-$ or US-5782324-$ or US-5345672-$ or US-5285874-$ or US-3205688-$ or US-3005259-$ or US-2493173-$ or US-2086488-$ or US-1876354-$ or US-1746494-$ or US-6532848-$ or US-6279699-$ or US-6206150-$ or US-5992581-$ or US-5823304-$ or US-5586625-$ or US-5483855-$).did. or (US-20010015307-$).did.	USPAT; US-PGPUB	2004/07/18 14:30
-		6	squealer adj band with thickness	USPAT; US-PGPUB	2004/07/18 14:31
-		1	6601284.pn.	USPAT; US-PGPUB	2004/07/18 15:12
-		2	(("4986149") or ("5483855")).PN.	USPAT; US-PGPUB	2004/07/18 15:13

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-	418	amsted.asn.	USPAT; US-PGPUB	2004/07/18 15:22
-	2	amsted.asn. and brak$4 near2 drum	USPAT; US-PGPUB	2004/07/18 15:23
-	159	(Brotherton.in.or Todd Griffin.in.) and brak$4 near2 drum	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/18 15:24
-	3	amsted.asn. and brak$4 near2 drum	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/18 15:23
-	8	(Brotherton.in.or Todd Griffin.in.) and brak$4 near2 drum with squealer	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/18 15:25
-	9	brak$4 near2 drum with squealer near4 remov$4 with balanc$4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/18 15:25
-	18	balanc$ with (remov$4 near4 metal or machining or metalworking or mill$4 or remov$ near4 material) with brak$ adj drum	USPAT; US-PGPUB	2004/07/19 06:59
-	3483	(width or depth) with (vary or varable or tapered or nonconstant) with groove	USPAT; US-PGPUB	2004/07/19 05:49
-	0	(width or depth) with (vary or varable or tapered or nonconstant) with groove with (brake adj drum or braking adj drum)	USPAT; US-PGPUB	2004/07/19 05:42
-	0	(width or depth) with (vary or varable or tapered or nonconstant) with groove with (brake adj drum or braking adj drum)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/19 05:43
-	1	(width or depth) with (vary or varable or tapered or nonconstant) with groove same (brake adj drum or braking adj drum)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/19 05:43
-	1	(width or depth) with (vary or variable or tapered or nonconstant) with groove same (brake adj drum or braking adj drum)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/19 05:43
-	16	(width or depth) near7 groove same (vary or variable or tapered or nonconstant) same (brake adj drum or braking adj drum)	USOCR	2004/07/19 05:45
-	2	(width or depth) near7 groove same (vary or variable or tapered or nonconstant) same squeal$	USOCR	2004/07/19 05:45
-	0	(width or depth) near7 groove same (vary or variable or tapered or nonconstant) same squeal$	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/19 05:46
-	8374	(width or depth) near7 groove same (vary or variable or tapered or nonconstant)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/19 05:46
-	0	("1686346" | "1746494" | "1876354" | "2086488" | "2493173" | "3005259" | "3205688" | "3354535" | "3355920" | "3670383" | "3991598" | "4067098" | "4262407" | "4554810" | "4563887" | "4781047" | "4958430" | "5285874" | "5345672" | "5385216" | "5586625" | "5596897" | "5782324" | "6148498").PN. and ((width or depth) near7 groove same (vary or variable or tapered or nonconstant))	USPAT	2004/07/19 05:47
-	24	("1686346" | "1746494" | "1876354" | "2086488" | "2493173" | "3005259" | "3205688" | "3354535" | "3355920" | "3670383" | "3991598" | "4067098" | "4262407" | "4554810" | "4563887" | "4781047" | "4958430" | "5285874" | "5345672" | "5385216" | "5586625" | "5596897" | "5782324" | "6148498").PN.	USPAT	2004/07/19 05:47
-	834	"24" and squeal$4	USPAT; US-PGPUB	2004/07/19 05:47
-	1089	"12" and squeal$4	USPAT; US-PGPUB	2004/07/19 05:47

-	24	("1686346" | "1746494" | "1876354" | "2086488" | "2493173" | "3005259" | "3205688" | "3354535" | "3355920" | "3670383" | "3991598" | "4067098" | "4262407" | "4554810" | "4563887" | "4781047" | "4958430" | "5285874" | "5345672" | "5385216" | "5586625" | "5596897" | "5782324" | "6148498").PN.	USPAT	2004/07/19 05:48
-	3	(("1686346" | "1746494" | "1876354" | "2086488" | "2493173" | "3005259" | "3205688" | "3354535" | "3355920" | "3670383" | "3991598" | "4067098" | "4262407" | "4554810" | "4563887" | "4781047" | "4958430" | "5285874" | "5345672" | "5385216" | "5586625" | "5596897" | "5782324" | "6148498").PN.) and squeal$4	USPAT; US-PGPUB	2004/07/19 05:48
-	29	squeal$4 adj (ring or band) with brak$4 near2 drum	USPAT; US-PGPUB	2004/07/19 05:49
-	4400	(width or depth) with (vary or varable or tapered or nonconstant) with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:53
-	5714	(width or depth) with (vary or variable or tapered or nonconstant) with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:53
-	0	((width or depth) with (vary or variable or tapered or nonconstant) with groove) and (squeal$4 adj (ring or band) with brak$4 near2 drum)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:49
-	42	squeal$4 adj (ring or band) with brak$4 near2 drum	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:50
-	42	(width or depth) with (vary or variable or tapered or nonconstant) with groove and 409/$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:54
-	18	(width or depth) with (vary or variable or tapered or nonconstant) with groove with balanc$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:55
-	4	groove with balanc$4 with brak$4 adj drum	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:57
-	0	groove with balanc$4 with brak$4 adj drum same obvious with design with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:58
-	0	groove with balanc$4 with brak$4 adj drum same tapered with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:58
-	0	groove with balanc$4 with brak$4 adj drum same adjustable with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:58
-	0	groove with balanc$4 with brak$4 adj drum same (shape or depth) with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 05:59

-	23	groove with brak$4 adj drum same (shape or depth) with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 06:05
-	1	1998-154805.NRAN.	DERWENT	2004/07/19 06:01
-	2	(US-6253883-$).did. or (US-20040026189-$).did.	USPAT; US-PGPUB	2004/07/19 06:02
-	36	groove same brak$4 adj drum same (shape or depth) with groove	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 06:03
-	36	(groove same brak$4 adj drum same (shape or depth) with groove) not ((width or depth) with (vary or variable or tapered or nonconstant) with groove with balanc$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 06:03
-	274	groove with brak$4 adj drum	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 06:05
-	21	groove with brak$4 adj drum and balanc$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 06:07
-	0	6532848.URPN.	USPAT	2004/07/19 06:05
-	9	("4067098" | "4428697" | "4836755" | "4926341" | "5483855" | "5586625" | "5782324" | "6112398" | "6196363").PN.	USPAT	2004/07/19 06:05
-	274	groove with brak$4 adj drum	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 06:07
-	2	groove with brak$4 adj drum same squeal$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 06:08
-	46	brak$4 adj drum same squeal$4 adj band	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/19 07:15

PLUS 7/15/04

Butler, Douglas

Here are the PLUS search results for 10697328.

This search was prepared by the staff of the Scientific and Technical Information Center, SIRA. If you have questions or comments about this search, please reply via email to PLUS@uspto.gov.

10697328_QUAL.txt

10697328_LIST.txt

10697328_WEST.txt

10697328_EAST.txt

10697328.east

10697328_CLS.txt

10697328_CLSTITLES.txt

10697328_WDS.txt

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PLUS Search Results for S/N 10697328, Searched July 13, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

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4821867
4854521
4860860
4865229
4891959
5012905
5025331
5238091
5263557
5305162
5333807
5346039
5347702
5370590
5376137
5381876
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5467849
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5625509
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Most Frequently Occurring Classifications of Patents Returned
From A Search of 10697328 on July 13, 2004

Original Classifications

15	188/218R
12	188/77R
12	188/77W
10	416/97R
6	56/11.3
3	30/382
3	82/1.11
3	188/250H
3	188/259
2	29/889.1
2	68/23.7
2	92/63
2	139/452
2	160/170
2	188/78
2	192/17R
2	242/334.6
2	242/336
2	360/85
2	416/241R
2	416/92
2	623/44

Cross-Reference Classifications

13	188/259
13	188/77R
9	192/107T
7	188/166
7	188/249
7	415/115
5	188/77W
5	188/78
5	192/17R
5	192/80
4	30/381
4	82/903
4	188/218R
4	188/264R
4	416/97R
3	29/889.72
3	192/70.2
3	254/379
3	360/94
3	360/95
3	415/173.1
2	29/416
2	29/527.5
2	56/11.6
2	82/112
2	188/171
2	188/250H
2	188/264A
2	188/2D
2	188/74

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2   192/113.34
2   192/224.1
2   226/195
2   242/334.6
2   242/365.4
2   242/559.3
2   254/378
2   256/1
2   256/2
2   301/6.91
2   360/85
2   409/123
2   415/173.4
2   416/224
2   416/228
2   416/92
```

Combined Classifications
```
25   188/77R
19   188/218R
17   188/77W
16   188/259
14   416/97R
 9   192/107T
 8   188/249
 8   415/115
 7    56/11.3
 7   188/166
 7   188/78
 7   192/17R
 5    30/381
 5   188/250H
 5   188/264R
 5   192/80
 4    82/1.11
 4    82/903
 4   242/334.6
 4   360/85
 4   360/94
 4   416/92
 3    29/889.1
 3    29/889.72
 3    30/382
 3   188/171
 3   188/264A
 3   192/70.2
 3   242/336
 3   254/379
 3   360/95
 3   415/173.1
 2    29/401.1
 2    29/416
 2    29/418
 2    29/527.5
 2    56/11.6
 2    68/23.7
 2    74/411.5
 2    82/112
 2    92/63
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2   139/452
2   160/170
2   188/2D
2   188/329
2   188/74
2   192/113.34
2   192/224.1
2   192/70.12
2   226/195
2   242/365.4
2   242/559.3
2   254/378
2   256/1
2   256/2
2   301/6.91
2   409/123
2   415/173.4
2   416/224
2   416/228
2   416/241R
2   623/44

10697328_CLSTITLES
Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 10697328 on July 13, 2004

```
25   188/77R        (12 OR, 13 XR)
         Class   188 :  BRAKES
         188/67          ROD
         188/74          .Transversely movable
         188/77R         ..Strap

19   188/218R       (15 OR, 4 XR)
         Class   188 :  BRAKES
         188/381         FRICTIONAL VIBRATION DAMPER
         188/218R        .Brake wheels

17   188/77W        (12 OR, 5 XR)
         Class   188 :  BRAKES
         188/67          ROD
         188/74          .Transversely movable
         188/77R         ..Strap
         188/77W         ...Wrap band type

16   188/259        (3 OR, 13 XR)
         Class   188 :  BRAKES
         188/381         FRICTIONAL VIBRATION DAMPER
         188/250R        .Shoes
         188/251R        ..Composite
         188/259         ...Flexible

14   416/97R        (10 OR, 4 XR)
         Class   416 :  FLUID REACTION SURFACES
         416/95          WITH HEATING, COOLING OR THERMAL INSULATION
                             MEANS
         416/96R         .Changing state mass within or fluid flow
                             through working member or carrier
         416/97R         ..Flow exhausted to working fluid

 9   192/107T       (0 OR, 9 XR)
         Class   192 :  CLUTCHES AND POWER-STOP CONTROL
         192/30R         CLUTCHES
         192/107R        .Engaging surfaces
         192/107T        ..Transversely engaging

 8   188/249        (1 OR, 7 XR)
         Class   188 :  BRAKES
         188/381         FRICTIONAL VIBRATION DAMPER
         188/234         .Shoe fasteners
         188/249         ..Flexible shoes

 8   415/115        (1 OR, 7 XR)
         Class   415 :  ROTARY KINETIC FLUID MOTORS OR PUMPS
         415/115         WITH PASSAGE IN BLADE, VANE, SHAFT OR ROTARY
                             DISTRIBUTOR COMMUNICATING WITH WORKING FLUID

 7   56/11.3        (6 OR, 1 XR)
         Class   056 :  HARVESTERS
         56/10.1         MOTORIZED HARVESTER
         56/10.8         .With selective control of drive means
         56/11.3         ..By brake and disengageable drive (e.g.,
```

clutch)

```
7   188/166        (0 OR, 7 XR)
         Class    188 :   BRAKES
         188/381          FRICTIONAL VIBRATION DAMPER
         188/166          .Spring

7   188/78         (2 OR, 5 XR)
         Class    188 :   BRAKES
         188/67           ROD
         188/74           .Transversely movable
         188/78           ..Expanding

7   192/17R        (2 OR, 5 XR)
         Class    192 :   CLUTCHES AND POWER-STOP CONTROL
         192/12R          CLUTCH AND BRAKE
         192/17R          .Peripheral brake

5   30/381         (1 OR, 4 XR)
         Class    030 :   CUTLERY
         30/165           CUTTING TOOLS
         30/166.3         .Saw
         30/381           ..Chain

5   188/250H       (3 OR, 2 XR)
         Class    188 :   BRAKES
         188/381          FRICTIONAL VIBRATION DAMPER
         188/250R         .Shoes
         188/250H         ..One-piece

5   188/264R       (1 OR, 4 XR)
         Class    188 :   BRAKES
         188/381          FRICTIONAL VIBRATION DAMPER
         188/264R         .Cooling and lubricating

5   192/80         (0 OR, 5 XR)
         Class    192 :   CLUTCHES AND POWER-STOP CONTROL
         192/30R          CLUTCHES
         192/66.1         .Axially engaging
         192/79           ..Exterior
         192/80           ...Strap

4   82/1.11        (3 OR, 1 XR)
         Class    082 :   TURNING
         82/1.11          PROCESS OF TURNING

4   82/903         (0 OR, 4 XR)
         Class    082 :   TURNING
         82/903           BALANCING AND CENTERING

4   242/334.6      (2 OR, 2 XR)
         Class    242 :   WINDING, TENSIONING, OR GUIDING
         242/324          UNWINDING AND REWINDING A MACHINE CONVERTIBLE
                             INFORMATION CARRIER (E.G., MAGNETIC TAPE OR PHOTOGRAPHI
C
                          FILM)
         242/334          .Carrier speed or tension control
         242/334.6        ..Carrier tension responsive signal
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4   360/85      (2 OR, 2 XR)
        Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                          RETRIEVAL
        360/81           RECORD TRANSPORT WITH HEAD MOVING DURING
                            TRANSDUCING
        360/83           .Tape record
        360/84           ..Rotating head
        360/85           ...Tape in container

4   360/94      (1 OR, 3 XR)
        Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                          RETRIEVAL
        360/88           RECORD TRANSPORT WITH HEAD STATIONARY DURING
                            TRANSDUCING
        360/90           .Tape record
        360/93           ..Tape in container
        360/94           ...Transport accommodates different types

4   416/92      (2 OR, 2 XR)
        Class   416 :  FLUID REACTION SURFACES
        416/90R          WITH FLUID PASSAGE IN WORKING MEMBER
                            COMMUNICATING WITH WORKING FLUID
        416/92           .Discharge solely at periphery normal to
                            rotation axis

3   29/889.1    (2 OR, 1 XR)
        Class   029 :  METAL WORKING
        29/592           METHOD OF MECHANICAL MANUFACTURE
        29/889           .Impeller making
        29/889.1         ..Repairing or disassembling

3   29/889.72   (0 OR, 3 XR)
        Class   029 :  METAL WORKING
        29/592           METHOD OF MECHANICAL MANUFACTURE
        29/889           .Impeller making
        29/889.7         ..Blade making
        29/889.72        ...Hollow blade

3   30/382      (3 OR, 0 XR)
        Class   030 :  CUTLERY
        30/165           CUTTING TOOLS
        30/166.3         .Saw
        30/381           ..Chain
        30/382           ...With guard means

3   188/171     (1 OR, 2 XR)
        Class   188 :  BRAKES
        188/381          FRICTIONAL VIBRATION DAMPER
        188/166          .Spring
        188/171          ..Electric release

3   188/264A    (1 OR, 2 XR)
        Class   188 :  BRAKES
        188/381          FRICTIONAL VIBRATION DAMPER
        188/264R         .Cooling and lubricating
        188/264A         ..Air-cooled, axially engaging

3   192/70.2    (0 OR, 3 XR)
        Class   192 :  CLUTCHES AND POWER-STOP CONTROL
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```
192/30R        CLUTCHES
192/66.1       .Axially engaging
192/70.11      ..Interposed, mating clutch-elements
192/70.16      ...With torque connection between
                  clutch-element and its shaft
192/70.19      ....Axially slidable connection
192/70.2       .....Spline connection for multiple
                  clutch-elements
```

```
3   242/336      (2 OR, 1 XR)
        Class   242 :  WINDING, TENSIONING, OR GUIDING
        242/324       UNWINDING AND REWINDING A MACHINE CONVERTIBLE
                          INFORMATION CARRIER (E.G., MAGNETIC TAPE OR PHOTOGRAPHI
C
                          FILM)
        242/335       .Cartridge system (i.e., cartridge work station
                          or cartridge)
        242/336       ..Adaptive or convertible
```

```
3   254/379      (0 OR, 3 XR)
        Class   254 :  IMPLEMENTS OR APPARATUS FOR APPLYING PUSHING
                          OR PULLING FORCE
        254/264       APPARATUS FOR HAULING OR HOISTING LOAD,
                          INCLUDING DRIVEN DEVICE WHICH CONTACTS AND PULLS ON C
ABLE

        254/266       .Device includes rotatably driven, cable
                          contacting drum
        254/375       ..Including means for preventing or retarding
                          rotation of drum in at least one direction
        254/378       ...Frictional brake assembly having rotating,
                          wheel structure and shiftable shoe or band
        254/379       ....Having fluid actuator for shifting shoe or
                          band
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```
3   360/95       (0 OR, 3 XR)
        Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                          RETRIEVAL
        360/88        RECORD TRANSPORT WITH HEAD STATIONARY DURING
                          TRANSDUCING
        360/90        .Tape record
        360/93        ..Tape in container
        360/95        ...With tape extraction
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```
3   415/173.1    (0 OR, 3 XR)
        Class   415 :  ROTARY KINETIC FLUID MOTORS OR PUMPS
        415/170.1     BEARING, SEAL, OR LINER BETWEEN RUNNER PORTION
                          AND STATIC PART
        415/173.1     .Between blade edge and static part
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```
2   29/401.1     (1 OR, 1 XR)
        Class   029 :  METAL WORKING
        29/592        METHOD OF MECHANICAL MANUFACTURE
        29/401.1      .Converting
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```
2   29/416       (0 OR, 2 XR)
        Class   029 :  METAL WORKING
        29/592        METHOD OF MECHANICAL MANUFACTURE
        29/412        .Obtaining plural product pieces from unitary
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                      workpiece
    29/416           ..Coacting pieces


2   29/418       (1 OR, 1 XR)
    Class    029 :  METAL WORKING
    29/592           METHOD OF MECHANICAL MANUFACTURE
    29/418           .Providing transitory integral holding or
                       handling portion


2   29/527.5     (0 OR, 2 XR)
    Class    029 :  METAL WORKING
    29/592           METHOD OF MECHANICAL MANUFACTURE
    29/527.1         .Combined manufacture including applying or
                       shaping of fluent material
    29/527.5         ..Metal casting


2   56/11.6      (0 OR, 2 XR)
    Class    056 :  HARVESTERS
    56/10.1          MOTORIZED HARVESTER
    56/10.8          .With selective control of drive means
    56/11.6          ..By means for regulating tautness of belt
                       drive


2   68/23.7      (2 OR, 0 XR)
    Class    068 :  TEXTILES:  FLUID TREATING APPARATUS
    68/3R            MACHINES
    68/13R           .Combined
    68/19            ..With liquid extractor
    68/23R           ...Centrifugal extractor (e.g., centrifuge)
    68/23.6          ....Including impulsing means (e.g., agitator)
                       within and independent of centrifuge
    68/23.7          .....Oscillating type


2   74/411.5     (1 OR, 1 XR)
    Class    074 :  MACHINE ELEMENT OR MECHANISM
    74/640           GEARING
    74/411.5         .With brake means for gearing


2   82/112       (0 OR, 2 XR)
    Class    082 :  TURNING
    82/112           PORTABLE LATHE FOR BRAKE DRUM, DISC, OR SHOE


2   92/63        (2 OR, 0 XR)
    Class    092 :  EXPANSIBLE CHAMBER DEVICES
    92/61            RELATIVELY MOVABLE WORKING MEMBERS
    92/62            .First working member moves second coaxial
                       working member through separating abutment surfaces
    92/63            ..With separate biasing means for a working
                       member


2   139/452      (2 OR, 0 XR)
    Class    139 :  TEXTILES:  WEAVING
    139/116.1        WEFT MANIPULATION
    139/429          .Weaving with stationary weft supply
    139/450          ..Weft handling
    139/452          ...Measuring or storing


2   160/170      (2 OR, 0 XR)
    Class    160 :  FLEXIBLE OR PORTABLE CLOSURE, PARTITION, OR
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```
                        PANEL
        160/130         PLURAL STRIP, SLAT, OR PANEL TYPE
        160/166.1       .Venetian blind type
        160/168.1R      ..With accumulating means
        160/170         ...Drum or roller wound strand


2  188/2D         (0 OR, 2 XR)
        Class    188 :  BRAKES
        188/2R          VEHICLE
        188/2D          .Bowdin wire-operated


2  188/329        (1 OR, 1 XR)
        Class    188 :  BRAKES
        188/67          ROD
        188/74          .Transversely movable
        188/78          ..Expanding
        188/325         ...Two shoes
        188/327         ....Anchors adjacent unoperated ends
        188/328         .....Common anchor pivot or abutment
        188/329         ......Rotary cam abutting shoe ends


2  188/74         (0 OR, 2 XR)
        Class    188 :  BRAKES
        188/67          ROD
        188/74          .Transversely movable


2  192/113.34     (0 OR, 2 XR)
        Class    192 :  CLUTCHES AND POWER-STOP CONTROL
        192/30R         CLUTCHES
        192/113.1       .Lubricating, insulating, or cooling
        192/113.3       ..Liquid cooled or lubricated clutch surfaces

        192/113.34      ...Lubricant or coolant between engaging
                           surfaces


2  192/224.1      (0 OR, 2 XR)
        Class    192 :  CLUTCHES AND POWER-STOP CONTROL
        192/215         TRANSMISSION AND BRAKE
        192/224         .Belt or chain transmission
        192/224.1       ..Belt tensioner affects brake operation


2  192/70.12      (1 OR, 1 XR)
        Class    192 :  CLUTCHES AND POWER-STOP CONTROL
        192/30R         CLUTCHES
        192/66.1        .Axially engaging
        192/70.11       ..Interposed, mating clutch-elements
        192/70.12       ...With means to cool or lubricate clutch parts


2  226/195        (0 OR, 2 XR)
        Class    226 :  ADVANCING MATERIAL OF INDETERMINATE LENGTH
        226/195         WITH MEANS TO RETARD MATERIAL MOVEMENT (E.G.,
                           "TENSIONER")


2  242/365.4      (0 OR, 2 XR)
        Class    242 :  WINDING, TENSIONING, OR GUIDING
        242/364         UNIDIRECTIONAL WINDING AND UNWINDING
        242/364.6       .Variable number of windings on support
        242/365.3       ..Stationary winding surface (e.g., with flyer)
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        242/365.4        ...Brake providing resistance to removal of
                            material

  2  242/559.3      (0 OR, 2 XR)
        Class   242 :   WINDING, TENSIONING, OR GUIDING
        242/550          UNWINDING
        242/558          .With supply coil replenishment
        242/559          ..Supply coil transfer apparatus
        242/559.3        ...Sequential coil shifting

  2  254/378        (0 OR, 2 XR)
        Class   254 :   IMPLEMENTS OR APPARATUS FOR APPLYING PUSHING
                          OR PULLING FORCE
        254/264          APPARATUS FOR HAULING OR HOISTING LOAD,
                          INCLUDING DRIVEN DEVICE WHICH CONTACTS AND PULLS ON CA
BLE

        254/266          .Device includes rotatably driven, cable
                            contacting drum
        254/375          ..Including means for preventing or retarding
                            rotation of drum in at least one direction
        254/378          ...Frictional brake assembly having rotating,
                            wheel structure and shiftable shoe or band

  2  256/1          (0 OR, 2 XR)
        Class   256 :   FENCES
        256/1            MISCELLANEOUS

  2  256/2          (0 OR, 2 XR)
        Class   256 :   FENCES
        256/2            BARBED

  2  301/6.91       (0 OR, 2 XR)
        Class   301 :   LAND VEHICLES:  WHEELS AND AXLES
        301/5.1          WHEEL
        301/6.1          .With drive or brake attachment
        301/6.91         ..Having vibration damper or heat insulator

  2  409/123        (0 OR, 2 XR)
        Class   409 :   GEAR CUTTING, MILLING, OR PLANING
        409/64           MILLING
        409/79           .With regulation of operation by templet, card,
                            or other replaceable information supply
        409/123          ..And provision for circumferential relative
                            movement of cutter and work

  2  415/173.4      (0 OR, 2 XR)
        Class   415 :   ROTARY KINETIC FLUID MOTORS OR PUMPS
        415/170.1        BEARING, SEAL, OR LINER BETWEEN RUNNER PORTION
                            AND STATIC PART
        415/173.1        .Between blade edge and static part
        415/173.4        ..Erodable or permanently deformable

  2  416/224        (0 OR, 2 XR)
        Class   416 :   FLUID REACTION SURFACES
        416/223R         SPECIFIC BLADE STRUCTURE (E.G., SHAPE,
                            MATERIAL, ETC.)
        416/224          .Having wear liner, sheathing or insert
```

2   416/228   (0 OR, 2 XR)
        Class   416 :   FLUID REACTION SURFACES
        416/223R   SPECIFIC BLADE STRUCTURE (E.G., SHAPE,
                             MATERIAL, ETC.)
        416/228   .Tined or irregular periphery

2   416/241R   (2 OR, 0 XR)
        Class   416 :   FLUID REACTION SURFACES
        416/223R   SPECIFIC BLADE STRUCTURE (E.G., SHAPE,
                             MATERIAL, ETC.)
        416/241R   .Coating, specific composition or
                             characteristic

2   623/44   (2 OR, 0 XR)
        Class   623 :   PROSTHESIS
        623/27   LEG
        623/39   .Knee
        623/43   ..Brake or latch
        623/44   ...Weight or position responsive